



Name: \_\_\_\_\_

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## Worksheet: Whale Dichotomous Key

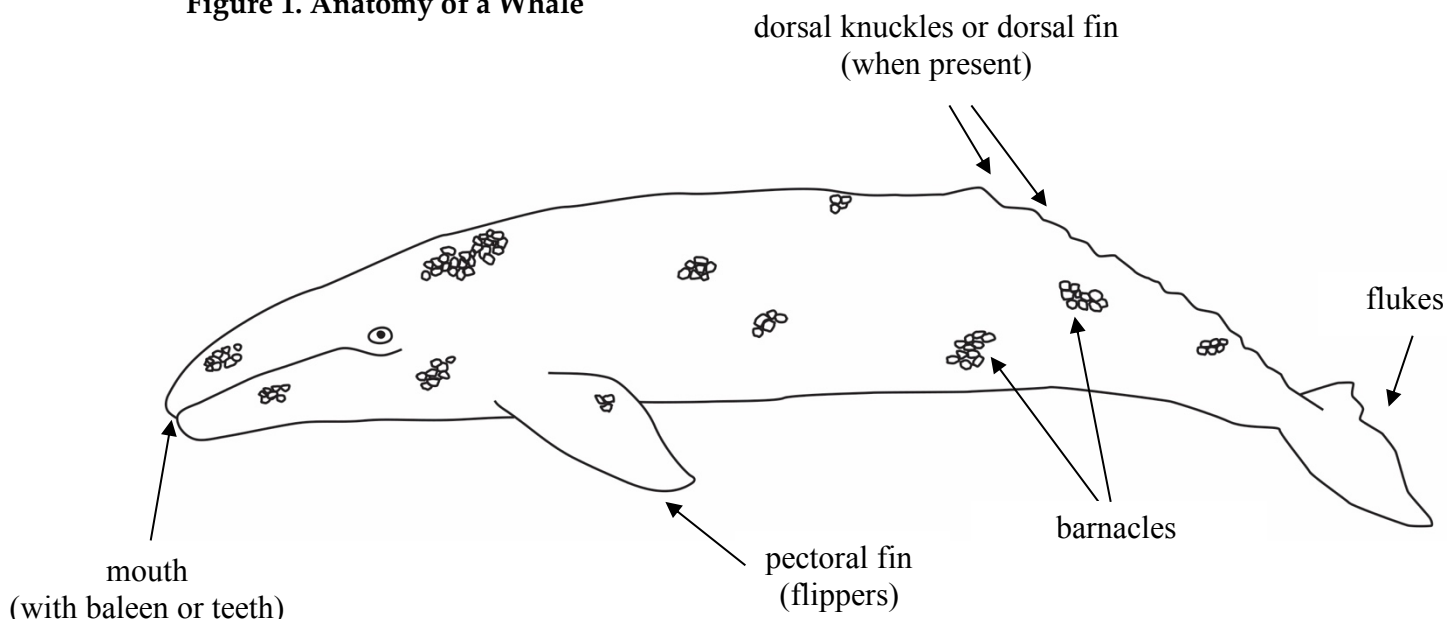
A classification system is a way of separating a large group of closely related organisms into smaller sub groups. With such a system, identification of an organism is easy. The scientific names of organisms are based on the classification system of living organisms.

To classify organisms, scientists often use a dichotomous key. A dichotomous key is a listing of specific characteristics, such as structure and behavior, in such a way that an organism can be identified through a process of elimination.

In this investigation, it is expected that you:

- 1) Use the key to identify 10 whales.
- 2) Use Figure 1 as a guide to the anatomical features used in the key.
- 3) Pick an animal in Figure 2. Read both sentences for #1 in the key and chose which one best describes the animal. Follow the numbers until you identify it to species.
- 4) Continue this process with each drawing until all animals have been identified. Write the name on the line below each animal.

**Figure 1. Anatomy of a Whale**



Name: \_\_\_\_\_

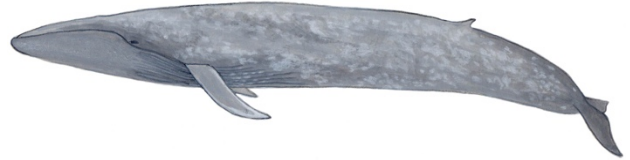
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**Figure 2. Whales**

Odontocetes (toothed whales):



Mysticetes (baleen whales):



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## Whale Dichotomous Key

- 1a. Mouth with baleen (no teeth)..... 6
- 1b. Mouth with teeth (no baleen)..... 2
  
- 2a. Large melon (head) ..... Sperm Whale
- 2b. Small rounded head..... 3
  
- 3a. Distinct black and white markings on body ..... Killer Whale (Orca)
- 3b. Body mostly gray ..... 4
  
- 4a. Has defined beak or "snout" ..... Bottlenose Dolphin
- 4b. No beak, rounded "snout" ..... 6
  
- 5a. Specked markings on sides..... Harbor Porpoise
- 5b. Body all gray, usually cover with scratches..... Risso's Dolphin
  
- 6a. Long pectoral fin/flippers with knobs on fins and head ..... Humpback Whale
- 6b. Shorter pectoral fin/flippers, smooth fins and head..... 7
  
- 7a. White band on pectoral fin/flipper ..... Minke Whale
- 7b. No white band on pectoral fin/flipper..... 8
  
- 8a. Body covered in barnacles, no dorsal fin, has dorsal knuckles ..... Gray Whale
- 8b. No barnacle growth on body, dorsal fin present..... 9
  
- 9a. Body solid blue color ..... Blue Whale
- 9b. Body with gray and white patterns ..... Fin Whale



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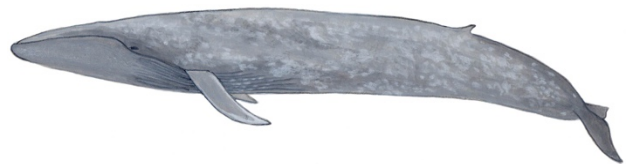
**Worksheet: Whale Dichotomous Key Answer Key**

Odontocetes (toothed whales):

Mysticetes (baleen whales):



**Bottlenose Dolphin**



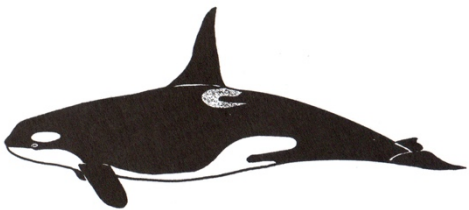
**Blue Whale**



**Risso's Dolphin**



**Gray Whale**



**Killer Whale (Orca)**



**Minke Whale**



**Harbor Porpoise**



**Fin Whale**



**Sperm Whale**



**Humpback Whale**

